RAGOSIN and MENDELSSOHN, Graphic Investigation as to the Movements of the Brain in the Living Man. *St. Petersb. Med. Wochenschr.*, Sept. 25th. DEBOVE and GOMBAULT, On the Sensory Decussation in the Medulla. *Arch. de Neurolgie*, I, July, 1880. OTT, The Dilatation of the Pupil as an Index of the Path of the Sensory Impulses in the Spinal Cord. *Jour. of Phys.*, II, v and vi, July, 1880. GRAY, The Physiological Anatomy of the Cord and the Motor Tract of the Cerebrum. *Ann. Anat. and Surg. Soc. of Brooklyn*, Oct. WESTPHAL, On Paradoxical Muscle Contraction. *Centralbl. f. Nervenheilk.*, Oct. BUFALINI, On the Preparation of the Cylinder Axis of the Nerve Fibre. *La Sperimentale*, Nov. SPITZKA, A Remarkable Peculiarity of the Anthropoid Brain. *Science*, July 17th.

b.—PATHOLOGY OF THE NERVOUS SYSTEM AND MIND, AND PATHOLOGICAL ANATOMY.

NEURITIS.—Leyden, *Charité Annalen*, Bd. v. (abstr. in *St. Petersb. Med. Wochenschr.*, No. 44), after the report of a case of multiple neuritis ending fatally in ten months, gives the following general data as to the pathological anatomy and symptomatology of the disorder :

I.—*Pathological Anatomy of Neuritis.*

1. *Simple acute neuritis or perineuritis*, characterized by swelling, hyperæmia and hemorrhage of the sheath. This form is at the bottom of many neuralgias, and marks itself by its changeability and tendency to extend itself. In it there is no nuclear proliferation or degeneration of the nerve substance.

2. *Chronic perineuritis*, consisting in thickening of the sheath without disease of the nerve, may exist without showing itself by any symptoms, but may also cause, occasionally, severe pain. To this form belong the chronic neuritis nodosa and the eccentric neuroma formations.

3. *Degenerative neuritis* (parenchymatous neuritis of Joffroy) leading to atrophy of the nerve with thickening of the nerve sheath, myositic muscular atrophy, and pigmentation of the muscles.

This form may occur *primarily*, as (*a*) traumatic (Erb) ; (*b*) rheumatic ; (*c*) saturnine (lead paralysis) ; (*d*) degenerative neuritis in acute diseases; (*e*) acute multiple neuritis; (*f*) diffuse neuritis found by Eichhorst in acute ascending paralysis, and by Dejerine in diphtheritic paralysis.

As *secondary* degenerative neuritis are to be reckoned (*a*) the descending neuritis with myositis connected with acute softening of the spinal cord; (*b*) the degenerative neuritis of chronic myelitis; (*c*) the acute ascending neuritis, a form not esteemed as fully established by Leyden, but one accepted by those authors who consider progressive muscular atrophy as a peripheral myositis advancing upward toward the cord.

II.—*Symptomatology of Neuritis.*

1. *Sensory symptoms.* Hyperæsthesia and tenderness, spontaneous tearing pains as well as pain on pressure or movement; the later occurring contractures are, at least in part, results of the increased sensibility. With these appear moderate anæsthesia, indistinctness of tact sense.

2. *Motor symptoms.* Paralytic motor disturbances, with later muscular atrophy, and, where this does not recover, degeneration reaction.

3. *Œdematous swelling* at the locality of the neuritis—a rather rare but very valuable symptom, perhaps connected with sanguineous infiltration.

4. *Trophic symptoms.* Fragility of the nails; excessive growth of hair. (Articular and cartilage affections were lacking in Leyden's cases.)

The extent of the symptoms corresponds to the nerve tracts involved.

Leyden expresses himself with much reserve in regard to the diagnostic significance of the degeneration reaction; he seems inclined, in those cases in which it appears in connection with poliomyelitis, to explain it by the secondary descending degenerative neuritis which accompanies this disease, and believes, indeed, that many cases described as poliomyelitis really belong to the class of multiple neuritis.

The tendency of neuritis to extend itself is especially marked with the neuralgic acute forms; it is less so with the degenerative forms. The former, which practically consists only in hyperæmia and swelling of the connective-tissue envelopes of the nerve, more readily attacks the cord, but is there limited to the envelopes. The degenerative form is more apt to pass downward to the periphery, where it leads to muscular atrophy through myositis (inflammatory proliferation of nuclei with pigmentation).

PARALYSIS OF ALL THE OCULAR NERVES.—Dr. H. Bresgen, of Kreuznach, reports in the *Deutsche Med. Wochenschr.* the following case: On September 2, 1875, he saw, for the first time, a well-formed and nourished and previously sound female, aged 25, who had been seeing double for a few days. The trouble was evidently due to paralysis of the right abducens. In the following spring, bilateral ptosis appeared, with slow but steadily advancing paralysis of all the muscles of the left eye, so that all movements were impeded. In the meanwhile the vision was unimpaired; also the pupillary reaction and the accommodation. The ophthalmoscope revealed nothing abnormal. The eyelids could be only partially closed. The patient's condition continued to grow worse till, in the beginning of 1879, both eyes were completely paralyzed, the ptosis more marked, and the eyelids could not be brought together. Speech was also much altered, though the lips and tongue were freely movable and nothing abnormal was observed in the palate; the voice was strongly nasal and the labials B and P could not be pronounced. Together with these symptoms appeared difficulty in swallowing, and noticeable emaciation. The movements of the iris and the accommodation remained perfect. By the commencement of the year 1880, the symptoms of bulbar paralysis had so advanced, together with general emaciation, that the patient could no longer be understood; the upper branch of the facial was also paralyzed, but the pupillary and accommodation movements were still perfect. Death occurred early in February.

Though a *post mortem* was not performed the clinical history indicated a combined paralysis of the two oculo-motor, trochlear, and abducens nerves, together with the upper branches of the facial, occurring before the dysphagia and alalia revealed the general bulbar paralysis. It indicates, also, very clearly, a lesion of some kind in the floor of the fourth ventricle and the aqueductus Sylvii, involving the angle of the facial root, the trochlear nucleus, and the fibres of origin of the motor oculi, except its most anterior fasciles. Hence the normal pupillary reaction and accommodation, which are incompatible with total paralysis of the third nerve, Graefe to the contrary notwithstanding, as has been shown by Volkers and Hensen, whose conclusions Dr. Bresgen quotes.

THE RELATION OF THE NERVES TO ANEURYSM.—Lewaschow, *St. Petersb. Med. Wochenschr.*, August 14th, publishes the account